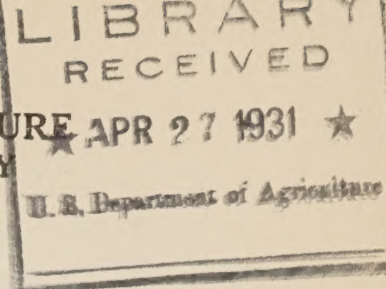


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UNITED STATES DEPARTMENT OF AGRICULTURE  
MONTHLY LETTER OF THE BUREAU ENTOMOLOGY



Number 203

March, 1931

STORED-PRODUCTS INSECTS

E. A. Back, in Charge

On March 9 C. K. Fisher, of the bean-weevil laboratory at Modesto, Calif., gave a short talk on the bean-weevil situation at a meeting of the Denair Farm Bureau Center. Mr. Fisher confined his talk largely to the progress made in reducing bean-weevil infestations through co-operation with various agencies. This was the first of a series of similar talks to be given on programs prepared by various Farm Bureau Centers in Stanislaus, Merced, and San Joaquin Counties, Calif.

In connection with his investigational work in March, G. B. Wagner, of the flour-mill insect investigations at Manhattan, Kans., visited mills in St. Joseph, Mo., Minneapolis, Minn., and in Salina, Newton, Lawrence, McPherson, Topeka, and Wichita, Kans.

On March 10 Perez Simmons, of the dried-fruit insect laboratory at Fresno, Calif., attended a meeting of the Agricultural Committee of the Fresno Chamber of Commerce. On March 21, Mr. Simmons and A. W. Morrill, jr., attended the monthly meeting of the Fresno Federal Business Association.

Frank G. Hinman, recently appointed Junior Entomologist to assist A. O. Larson in the pea-weevil investigations, with headquarters at Corvallis, Oreg., has translated from the German F. Zacher's important publication, "Biology of Seed Beetles (Bruchidae - Lariidae)." A copy of this translation is being filed with the Bureau Library.

On March 18 W. D. Reed, of the tobacco-insect laboratory at Danville, Va., conferred with Dr. A. S. Pearse, Professor of Zoology, and Dr. I. E. Gray, Professor of Entomology, of Duke University. On March 5, 6, and 7 E. M. Livingstone and W. D. Reed visited the tobacco warehouses in Norfolk, Va. On March 21 Mr. Reed was in Washington for conference regarding his work.

On March 14, Newell E. Good, of the flour-mill insects laboratory at Silver Spring, Md., received from the British Museum, with our American species of *Tribolium*, a specimen of *T. indicum*, a rare species recently described from India.



## FOREST INSECTS

F. C. Craighead, in Charge

Dr. Craighead and R. A. St. George spent a few days the latter part of March at Asheville, N. C., in conference with the Director of the Appalachian Forest Experiment Station and in getting the spring work in cooperation with the experiment station under way. Mr. St. George went on to New Orleans, where he will inspect, with R. M. Lindgren, of the Bureau of Plant Industry, a series of logs treated with various chemicals to prevent fungous disease and insect attack.

William Middleton left Washington the latter part of the month in company with F. L. Mulford, of the Bureau of Plant Industry, to make an inspection of fourteen national cemeteries in the southeastern part of the United States. The inspections will serve as a basis for recommendations to the War Department for improving the condition of the trees in those cemeteries.

A survey of the control work which was carried on during the past winter on the Idyllwild and Corte Madera areas, in southern California, was made by K. A. Salman and L. G. Baumhofer, March 5 to 11. These projects were carried on largely on private lands, but with the cooperation of the Forest Service where adjoining Federal land was infested. The overwintering trees of the western pine beetle had been felled and the bark burned at the time the examination was made. The work on the Corte Madera tract, a small but completely isolated private area, had been very thoroughly carried out.

On March 6 control work on the western pine beetle was started in Sequoia National Park. Two camps have now been established, and it is expected that work in three tributary watersheds of the Kaweah River will be completed by May 1. Supt. White and Mr. Coffman of the National Park Service were at the Berkeley laboratory on March 6 to make final plans with the Bureau of Entomology for the execution of this project. Albert Wagner was assigned by the Bureau to direct the training of the control crews in spotting methods and treatment of trees.

The Yosemite National Park started its control program in the yellow-pine belt on March 16. In an inspection of this area on March 14 and 15, Dr. Salman found that an increase of the western pine beetle had developed late in the fall of 1930 on national forest lands adjoining the park boundaries. This condition threatens the Wawona Road screen, a strip of timber sheltering the road through the park from the adjacent cutover lands. Conditions were found to be similar to those on other areas of the southern Sierra region where epidemics have recently developed. An allotment was promptly made by the Forest Service to carry on control work in conjunction with that within the national park. Mr. Baumhofer and Dr. Salman will assist in carrying out this project.



The annual meeting of the Forest Service Regional Investigative Committee for Region 5 was held in San Francisco, March 2 to 4, and was attended by J. M. Miller and K. A. Salman. In the review of the research program of the Bureau of Entomology the discussion centered largely on the regional survey of bark-beetle infestations which will be started by the Berkeley laboratory during the coming field season.

J. A. Beal, of the Portland, Oreg., field laboratory, has completed his report on studies of insects developing in logging operations in western yellow pine. This study was based upon tractor logging on the Weyerhaeuser operation near Klamath Falls.

A report covering the 1930 season's experimental work on the fir engraver beetle (Scolytus ventralis) was completed by G. R. Struble during the past month. The report includes a study of losses in white fir, the life history of S. ventralis, and studies on a fungus associated with S. ventralis. Experimental work in the laboratory on high temperatures as they affect the larvae of S. ventralis show that their lethal point is about 5° higher than that for the larvae of Dendroctonus brevicomis. Tests on the development of S. ventralis larvae at constant temperatures show a wider range of development than for the larvae of D. brevicomis.

J. C. Evenden of the Coeur d'Alene, Idaho, field laboratory, and F. P. Keen of the field laboratory at Portland, Oreg., attended the annual meeting of the Western Forestry and Conservation Association in Spokane, Wash., on March 19 to 21, inclusive. Mr. Keen presented a paper at this meeting, outlining the present status of insect conditions within the western forests, as well as the investigative program which is under way. This paper was well received, and forest-insect problems were given considerable attention at this meeting.

B. H. Wilford, under temporary appointment with the Bureau, reported for duty in Coeur d'Alene on March 2. He will have charge of the field operations in connection with a study of the spruce budworm which is to be conducted within the Cody Canyon, Wyo., during the coming season. The purpose of this study is the development of a method of control which will be both effective and economical in the protection of trees which have high scenic values.

C. W. Collins, in charge of the gipsy-moth laboratory, gave a talk concerning its activities before the Boston U. S. D. A. Club on March 24. In connection with his talk, three motion-picture films of the Department of Agriculture were shown. These films have to do with the life histories of the gipsy and brown-tail moths, their parasites, and methods of control.

In the Monthly letter for November, 1930, it was stated that a small shipment of parasites of the birch leaf-mining sawfly, Phyllotoma nemorata Fall., had been received from P. B. Dowden, of the European gipsy moth station at Budapest, Hungary. A second shipment, containing an additional hymenopterous parasite, has since been received. Both lots of material were secured in northern Austria.



R. Wooldridge, of the gipsy-moth laboratory, spent March 23 and 24 at an isolated gipsy-moth infestation in Milan, N. Y. Milan is about 9 miles east of the Hudson river in the so-called "gipsy moth barrier zone." The special object of Mr. Wooldridge's trip was to secure information concerning any natural enemies that might be present in the infestation. Puparia of two tachinid flies, Compsilura concinnata Meig. and Sturmia scutellata R. D., were found. The discovery of the presence of the latter is of particular interest because the laboratory has no records of the parasite having been previously taken in New York State.

Visitors at the gipsy-moth laboratory during March included the following: S. A. Rohwer, Assistant Chief, Plant Quarantine and Control Administration, and W. A. Osgood, New Hampshire State Moth Work, on March 10; Nelson Trafton, Maine Department of Agriculture, on March 14; B. Connor, Business Manager, Plant Quarantine and Control Administration, on March 18; and M. P. Jones, Extension Entomologist, Bureau of Entomology, on March 27.

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#### JAPANESE-BEETLE AND ASIATIC-BEETLE RESEARCH

C. H. Hadley, in Charge

On March 3 W. E. Fleming and F. E. Baker, of the Moorestown, N. J., field laboratory, and V. A. Johnson and C. Shrieber, of the Camden office of the Plant Quarantine and Control Administration, left for Milford, Del., to take samples of poisoned soil for arsenic analysis. The period from March 3 to 5 was devoted to taking these samples in the different nurseries in Delaware, Maryland, and Virginia.

C. B. Tilley, of the Grasselli Chemical Company, stopped at the laboratory on March 18 to discuss the use of barium fluosilicate as a soil insecticide.

On March 16 E. R. Van Leeuwen returned to his regular duty at the laboratory after a furlough of three and one-half months, during which period he was engaged as an instructor for the Davey Tree Expert Company of Kent, Ohio.

On March 24 C. H. Hadley and W. E. Fleming attended a conference in New Brunswick, N. J., with T. J. Headlee, E. E. Evaul, E. G. Rex, and P. A. van der Meulen, in regard to the control of the larvae of the Japanese beetle in lawns.

Members of the laboratory staff have held frequent conferences with specialists from the Camden office of the Plant Quarantine and Control Administration in regard to the different control measures and the cooperative work now in progress.



## TAXONOMY

### Harold Morrison, in Charge

George Englehart, of the Brooklyn Museum, Brooklyn, N. Y., spent a few days the first of the month working in the National collection of the family Aegeriidae.

Prof. Herbert Osborn, of the department of zoology and entomology, Ohio State University, at Columbus, Ohio, was in the National Museum March 10 and 13, studying the collections of Cicadellidae.

Frank Johnson, of New York City, spent March 13 and 14 consulting with Dr. William Schaus in the section of Lepidoptera.

A. E. Brower, a graduate student in the department of entomology, Cornell University, Ithaca, N. Y., worked in the National collections of North American Catocala March 17 to 21.

Dr. George N. Wolcott stopped in Washington on March 17, while en route to Porto Rico, to inquire about the determination of material which he had previously sent in.

Dr. F. S. Bodenheimer, of Palestine, visited the taxonomic unit on March 14 to 17. He is especially interested in scale insects, but discussed various problems with specialists in the unit.

D. S. Bullock, of Angol, Chile, was in the Division of Insects in the National Museum March 20 to discuss the insects of his region. He was especially interested in the Chilean Coleoptera.

From March 19 to 24 C. F. W. Muesebeck, of the Bureau's gipsy-moth and brown-tail moth laboratory, Melrose Highlands, Mass., worked in the section of Hymenoptera on a revision of the North American species of the braconid genus Macrocentrus.

Dr. S. W. Frost, of the department of zoology and entomology, Pennsylvania State College, spent March 26 in the taxonomic unit discussing leaf-mining insects, especially Lepidoptera, Diptera, and their hymenopterous parasites.

Herbert S. Ardell, of the New York Evening Post, New York City, N. Y., called at the National Museum recently to see the collection of spiders. He is interested in photographing and writing popular articles on these arachnids.

On March 26 Prof. J. O. Pepper, of the department of zoology and entomology, Pennsylvania State College, examined Cicadellidae in the National collection.



Prof. W. E. Hoffmann, head of the biology department of Lingnan University, Canton, China, came to Washington March 27 and will spend some time in the taxonomic unit.

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## INSECT PEST SURVEY AND EXTENSION ENTOMOLOGY

J. A. Hyslop, in Charge

George N. Wolcott, of Porto Rico, visited the office of the Insect Pest Survey on March 18 to discuss the periodical northward flights of the cotton leaf worm (Alabama argillacea Hbn.)

Wm. E. Hoffmann, of Lingnan University, Canton, China, visited the office of the Insect Pest Survey to look over the distribution reports of Nezara viridula L. Arrangement was made with Mr. Hoffmann whereby he will make a monthly report on insect conditions in China, the report to be published in the monthly bulletin of the Insect Pest Survey.

C. H. Brannon, Entomological Specialist at the North Carolina Agricultural Experiment Station, Raleigh, N. C., visited the Insect Pest Survey on March 18 to obtain information on the distribution of the harlequin bug (Murgantia histrionica Hahn).

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## TROPICAL, SUBTROPICAL, AND ORNAMENTAL PLANT INSECTS

A. C. Baker, in Charge

The annual Central California Citrus Institute was held at Lindsay, Calif., on March 4. E. A. McGregor spoke on "The control of citrus thrips and citricola scale." On March 12 Mr. McGregor spoke on the same topic at the quarterly meeting of the Orange Cove Farm Center.

On March 28 Dr. Henry H. Richardson was appointed Assistant Entomologist to assist in the investigations of greenhouse insects at the Tropical Greenhouse in Washington. Dr. Richardson was formerly temporary Field Assistant, under Dr. F. A. Fenton, on the cotton boll weevil investigations. He was later appointed Junior Entomologist and assigned to gipsy-moth work at the Melrose Highlands, Mass., field laboratory. He resigned from this position in 1928 to take up graduate work at the Iowa State College and received his doctor's degree in March of this year.



## COTTON INSECTS

F. C. Bishopp, Acting in Charge

Dr. A. F. Woods, Director of Scientific Work, S. H. McCrory, Chief of the Division of Agricultural Engineering, Bureau of Public Roads, and E. W. Sheets, Chief of the Division of Animal Husbandry, Bureau of Animal Industry, spent March 26 at the Tallulah, La., field laboratory. The various activities of the laboratory were discussed with the members of the staff directly in charge of the different lines of work. The visitors showed much interest in the work, particularly in the investigations of the use of the airplane for applying various insecticides and for studying insect migration.

Norman Allen, Junior Entomologist, Division of Truck Crop Insects, Bureau of Entomology, Baton Rouge, La., was a visitor at the field laboratory at Tallulah, on March 23. Mr. Allen was principally interested in flight-screen and airplane collections of the striped cucumber beetle.

D. A. Isler, Agricultural Engineer, Bureau of Public Roads, left Tallulah March 13 to lay out experimental plots for plowing and irrigation in control of the pink bollworm at Presidio, Tex. He returned on March 25.

George N. Fagan, Junior Administrative Assistant, reported for duty at the Tallulah field laboratory on March 2, having been transferred from the Plant Quarantine and Control Administration, Mediterranean fruit-fly laboratory, at Orlando, Fla.

F. C. Bishopp returned to Washington from Tallulah on March 4.

On March 20 T. C. Barber took up his work on the cotton leaf perforator at Calexico, Calif. En route from Brownsville, Tex., he spent several days at Tucson, Ariz., completing his report on last year's experiments in the Imperial Valley and conferring with T. P. Cassidy on plans for this season's work.

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## TRUCK CROP INSECTS

W. H. White, Entomologist

Dr. N. F. Howard, Senior Entomologist, in charge of the field laboratory at Columbus, Ohio, visited Washington, March 5 to 7, to confer with Bureau officials.

J. E. Dudley, jr., Entomologist, in charge, and T. E. Bronson, Junior Entomologist, of the field laboratory at Madison, Wis., attended the meetings of the North Central States Entomologists at Urbana, Ill., March 4 and 5.



L. W. Brannon visited Washington on March 18 to discuss the problem of the Mexican bean beetle. Mr. Brannon was en route to Norfolk, Va., from Columbus, Ohio, where he was temporarily located during the winter.

On March 18 M. W. Stone, Junior Entomologist at the Alhambra, Calif., field laboratory, gave a talk at the Norfolk, Calif., Farm Center on the control of vegetable insects.

J. B. Demaree and H. E. Parson, of the Bureau of Plant Industry laboratories at Thomasville, Ga., and Springhill, Ala., respectively, visited the Biloxi, Miss., field laboratory on March 23.

Troy Thompson, H. J. Carter, and T. F. Johnson, inspectors of the Alabama State Department of Agriculture, visited the Biloxi, Miss., field laboratory in March in connection with work on the sweetpotato weevil in Alabama.

J. R. Douglass, who was temporarily located at Columbus, Ohio, during the winter, left for Estancia, N. Mex., on March 25.

Dr. H. E. Burke, Senior Entomologist, of the Palo Alto, Calif., shade-tree insects laboratory of the Forest Insects Division, visited the Alhambra, Calif., field laboratory on March 27.

K. L. Cockerham, Associate Entomologist, in charge of the field laboratory at Biloxi, Miss., reports that an intensive campaign of sweetpotato-storage inspection for the sweetpotato weevil has just been completed in Mobile County, Alabama. In addition to the regular employees of the Bureau, namely, S. C. Brummitt and O. T. Deen, the State Department of Agriculture of Alabama furnished three inspectors, Troy Thompson, H. J. Carter, and T. F. Johnson, to assist in this work. During the period, March 2 to March 26, inclusive, 1,264 farm visits and inspections were made. No infestation of the sweetpotato weevil was found during these inspections. The last infestation was found in November, 1930.

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## CEREAL AND FORAGE INSECTS

W. H. Larrimer, in Charge

The meeting of the North Central States Entomologists, which was held at Urbana, Ill., on March 4 and 5, was attended by the following members of this division: Dr. W. H. Larrimer, D. J. Caffrey, C. M. Packard, W. B. Noble, H. L. Painter, and J. S. Wade.



Dr. F. W. Poos, of the Arlington Experiment Farm, Arlington, Va., visited the Virginia Truck Experiment Station at Norfolk, Va., on March 3 to obtain material in connection with studies in the transmission of plant diseases.

Dr. Dan T. Gray, Director of the Arkansas Experiment Station, Fayetteville, Ark., visited the New Orleans, La., field laboratory on March 28.

Prof. Herbert Osborn, of the Ohio State University, visited the Washington, D. C., office the week of March 9 for consultation with Bureau officials.

The following appointments have been made in this division during the month: Ralph Bunn, John L. Joy, Richard C. Newton, and Leland J. Jones, Junior Entomologists, for duty at Salt Lake City, Utah; Frank Lieberman, Field Assistant at Salt Lake City; and Ralph Schopp, Field Assistant at Toledo, Ohio.

Dr. W. J. Schoene, Entomologist of the Virginia Agricultural Experiment Station, Blacksburg, Va., visited the laboratory at the Arlington Experiment Farm, Rosslyn, Va., on March 21 in connection with leafhopper investigations.

Dr. L. O. Howard has made the following request of this division: "Will you, when you happen to be writing to your field laboratories, suggest that the entomologists of your branch, especially if they have published something, should by all means send in their photographs for the Bureau collection, in case they have not already done so. Although the collection now numbers well over twenty-five hundred, I know that a number of the younger men of the Bureau are not represented, and this surely should not be the case."

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#### INSECTS AFFECTING MAN AND ANIMALS

F. C. Bishopp, in Charge

On March 2 Arthur W. Lindquist was appointed Junior Entomologist and assigned to duty at the Uvalde, Tex., field laboratory.

On March 13 D. C. Thurman was appointed Agent and entered upon duty at Menard, Tex. Mr. Thurman is assisting in trapping tests for control of blowflies on the cattle range.

G. E. Bell was appointed Laboratory Assistant, and entered upon duty at the field laboratory at Charleston, S. C., on March 6. He will be engaged in investigations of sand flies.



R. W. Wells, Associate Entomologist at the Galesburg, Ill., field laboratory, made a trip into Iowa to make observations on the prevalence of cattle grubs at points in that State. He was at Des Moines on March 12, and at Ames on March 13 and 14.

Herman Schroeder, Junior Entomologist at the Charleston, S. C., field laboratory, and D. G. Hall, Assistant Entomologist at the Coachella, Calif., field laboratory, spent the greater part of the month of March in making a survey of typical areas in Georgia, South Carolina, and Florida in a study of the prevalence of sand flies and ticks.

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### DECIDUOUS FRUIT INSECTS

Dr. C. L. Marlatt, Chief of Bureau, Acting in Charge

On March 12, Dr. W. W. Stockberger visited the Peach Insect Laboratory at Fort Valley, Ga., where he inspected the laboratory, equipment, and experimental orchard, and was shown the work that is under way.

James B. Majure, who has completed the requirements for the B. S. degree at the Mississippi A. & M. College, was appointed Field Assistant at the Peach Insect Laboratory, Fort Valley, Ga., and reported for duty on March 23.

Dr. John Gray, in charge of studies in the ecology of the oriental fruit moth at the Moorestown, N. J., field laboratory, spent March 12 and 13 in Washington in conference relative to this season's program of work.

Dr. Philip Garman, Assistant Entomologist at the Connecticut Agricultural Experiment Station, New Haven, Conn., visited the field laboratory at Moorestown, N. J., on March 23 for conference with H. W. Allen regarding cooperative arrangements for further shipments of Macrocentrus ancylivorus from New Jersey to Connecticut.

Dr. E. A. Richmond was a visitor at the Moorestown field laboratory on March 10.



LIBRARY

Mabel Colcord, Librarian

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Fifty common plant galls of the Chicago area. 30 p., illus. Chicago, 1930. (Field Museum of Nat Hist. Botany Leaf. 16.)

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